



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

SEP 19 2011

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

OSWER Directive #9355.5-32

**MEMORANDUM**

**SUBJECT:** Clarification of OSWER's 1995 Technical Impracticability Waiver Policy

**FROM:** James E. Woolford, Director *James E. Woolford*  
Office of Superfund Remediation and Technology Innovation

Reggie Cheatham, Acting Director *Reggie Cheatham*  
Federal Facilities Restoration and Reuse Office

**TO:** Superfund National Policy Managers, Regions 1 - 10

**Overview**

The purpose of this memorandum is to provide clarification to the 1995 Office of Solid Waste and Emergency Response (OSWER) memorandum entitled, *Superfund Groundwater RODs: Implementing Change This Fiscal Year*, July 31, 1995, (OSWER Directive 9335.3-03P) regarding the use of Technical Impracticability (TI) waivers at Comprehensive Environmental Response Compensation and Liability Act (CERCLA) sites with Dense Non-Aqueous Phase Liquid (DNAPL) contamination.

The 1995 memorandum did modify the existing *Guidance for Evaluating the Technical Impracticability of Ground-Water Restoration*, September 1993, (OSWER Directive 9234.2-25), by expecting each region to employ a TI waiver for sites with DNAPL contamination and to include written justification of the TI waiver in the Fiscal Year 1995 remedy decision document (e.g., ROD). This is to clarify that: 1) the 1995 memorandum was intended to apply only to remedy decisions made in Fiscal Year 1995 and 2) DNAPL contamination in and of itself should not be the sole basis for considering the use of a TI waiver at any given site.

Improvements in science and technology have shown much progress in characterizing and successfully treating/extracting DNAPLs from subsurface areas. Recent remedy decisions have selected a variety of in-situ technologies to address DNAPL contamination such as in-situ chemical oxidation, in-situ bioremediation and in-situ thermal remediation. We recommend that regional offices continue to refer to the 1993 TI Guidance (see <http://www.epa.gov/superfund/health/conmedia/gwdocs/techimp.htm>) when evaluating whether a TI waiver may be appropriate at a site. Regions are reminded that even when applicable or relevant and appropriate requirements (ARARs) are waived at a Superfund site due to TI, the NCP states that EPA's general expectations are to prevent further migration of the contaminated

groundwater plume, prevent exposure to the contaminated groundwater and evaluate risk reduction measures as appropriate (see CFR §300.430(a)(1)(iii)(F)). In addition, CERCLA Section 121's requirement to select remedies that are protective of human health and the environment is separate and independent from the statute's requirement to comply with ARARs. Thus, even where an ARAR is waived pursuant to CERCLA Section 121(d)(4), the remedy must still be protective of human health and the environment.

### Implementation

Consistent with CERCLA and the NCP, the Superfund remedial and federal facilities programs remain committed to restoring groundwater to beneficial use at NPL sites. Furthermore, consistent with the Government Performance and Results Act (GPRA), our programs seek to bring human exposures under control as quickly as possible. In situations where groundwater restoration is unattainable from an engineering perspective, considering a TI waiver may be an appropriate part of the remedy selection process. Regions generally should not consider the mere presence of DNAPL alone but should provide a sufficient, science-based justification for invoking a TI waiver. Regions should continue to consider up-to-date information available from OSWER's Technology Innovation and Field Services Division (TIFSD) and other current knowledge of potential DNAPL remediation techniques when evaluating alternatives and making CERCLA response decisions.

Since DNAPL remedies are included as part of response actions for both federal facilities and non-federal sites, CERCLA Section 120(a)(2) provides that all guidelines, rules, regulations, and criteria for preliminary assessments, site investigations, National Priority List (NPL) listing and remedial actions are applicable to federal facilities to the same extent as they are applicable to other facilities.

For the reasons stated above, the 1995 memorandum entitled, *Superfund Groundwater RODs: Implementing Change This Fiscal Year*, July 31, 1995 (OSWER Directive 9335.3-03P) should no longer be considered when making current site decisions.

Copies of this document are available on our web site

<http://www.epa.gov/superfund/health/conmedia/gwdocs/htm>. For further information on TI waivers for CERCLA remedial actions, please contact Matt Charsky at [charsky.matthew@epa.gov](mailto:charsky.matthew@epa.gov) or (703) 603-8777 or Dave Bartenfelder at [bartenfelder.david@epa.gov](mailto:bartenfelder.david@epa.gov) or (703) 603-9047. For federal facilities information, please contact your Federal Facilities Restoration and Reuse Office (FFRRO) Regional Coordinator.

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